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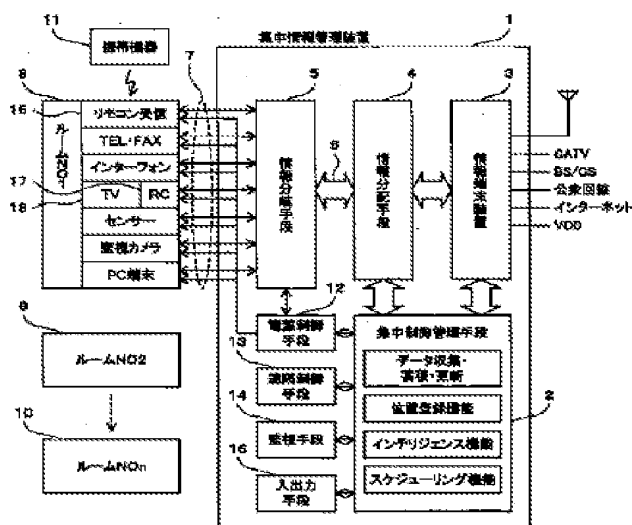
(54) Title: CENTRALIZED INFORMATION MANAGEMENT SYSTEM

(57) Abstract
Problem

The problem is to construct a system that can take advantage of remote control to functionally manage in-house information devices.

Means to solve

A system that can collectively manage a plurality of in-house information devices has an information terminal device 3 that can selectively receive a large amount of multimedia information, an information distribution means 4 that distributes the selectively received multimedia information to the in-house information devices, information branching means 5 that branches off the distributed formation to the corresponding in-house information device 18 or the like in each room via in-house wirings 6, 7, a power supply control means that collectively controls the power supply of each of the plurality of information devices in rooms 8, 9, 10 in order to save power, a remote control means 13 that collectively and remotely controls each of the plurality of in-house information devices by using portable device 11 carried by each family member, and a centralized control management means 2 constituted by a computer system that controls and manages the in-house information devices in a centralized manner depending on



Key: 1 Centralized information management device
2 Centralized control management means
Data collection, storage, and updating
Position registration function
Intelligent function

the communication line connection of a LAN or the like.

- Scheduling function
- 3 Information terminal device
 - CATV
 - BS/CS
 - Public line
 - Internet
 - VOD
- 4 Information distribution means
- 5 Information branching means
- 8 Room NO1
- 9 Room NO2
- 10 Room NO_n
- 11 Portable device
- 12 Power control means
- 13 Remote control means
- 14 Monitoring means
- 15 Input/output means
- 16 Remote control receiver
 - TEL-FAX
 - Interphone
 - TV RC
 - Sensor
 - Monitor camera
 - PC terminal

[There are no amendments to this patent.]

Claims

1. A centralized information management system that collectively manages a plurality of in-house information devices, such as CATV, VOD (video on demand), and Internet TV that distribute pictures by multicast, in an office or a home, characterized by having

an information terminal device that can selectively receive a large amount of multimedia information of CATV, VOD, Internet TV, or the like that require a reception function under certain conditions, such as ID check,

an information distribution means that distributes the multimedia information selectively received by said information terminal device to the corresponding in-house information devices,

an information branching means that branches off the information distributed by said information distribution means to the corresponding in-house information devices in each room via in-house wirings,

a power supply control means that collectively controls the power supplies of the plurality of in-house information devices in each room via said in-house wirings in order to save power,

a remote control means that remotely controls the plurality of in-house information devices in each room and the peripheral devices connected to these information devices in a collective manner by using a remote device having a remote operation function and carried by each family member, and

a centralized control management means constituted by a computer system that controls the plurality of in-house information devices in each room depending on communication line connection of a LAN or the like and performs centralized management in association with each of the aforementioned means.

2. The centralized information management system described in Claim 1, characterized by the fact that said power supply control means can turn on the power before sending/receiving information with respect to said in-house information devices and turn off the power after the information has been sent/received in association with said centralized control management means in order to restrain the standby power.

3. The centralized information management system described in Claim 1, characterized by having a monitoring means that monitors the state of each room based on the information of a security camera, smoke, gas, or temperature detectors, and other detection sensors in addition to the aforementioned means.

4. The centralized information management system described in any of Claims 1-3, characterized by the fact that said remote control means receives the remote operation signals formed by infrared rays or radio waves transmitted from said portable device by a remote control signal receiver and transfers these signals to said centralized control management means, and

said centralized control management means decodes the input remote operation signals, transmits the remote control signals to the in-house information devices required to operate depending on the communication line connection of the LAN or the like, and performs control.

5. The centralized information management system described in Claim 4, characterized by the fact that said centralized control management means has a position registration function for detecting movement of said portable device registered for each person via said remote control signal receiver and can control the in-house information devices in each room according to preset contents corresponding to the movement of said portable device detected by said position registration function.

6. The centralized information management system described in any of Claims 3-5, characterized by the fact that said centralized control management means conducts action analysis and preference analysis targeting the operation history and preference of each registered person who has controlled in-house information devices based on information obtained by said remote control means and monitoring means and has an intelligent function and scheduling

function that is reflected in various operations including automatic operation of each in-house information device.

7. The centralized information management system described in any of Claims 1-6, characterized by the fact that said centralized control management means detects the operation information of each person via said remote control means and receives the information from an in-house information device, which is equipped with health check sensors and can transmit the detected data, to manage the health of each person.

8. The centralized information management system described in any of Claims 1-3, characterized by the fact that said information branching means has a socket that connects cables or the like on a wall surface and has a long pipe-shaped wiring member that can accommodate many cables in the wall, and each cable is wired from said socket through said pipe-shaped wiring member to an in-house information device via a socket in each room.

Detailed explanation of the invention

[0001]

Technical field of the invention

The present invention pertains to a multifunctional centralized information management system that manages a large amount of multimedia compatible in-house information devices in a centralized manner.

[0002]

Prior art

Conventionally, for a CATV system, BS broadcasting, CS broadcasting, and other charged broadcasting services, conditional restricted reception or conditional access functioning (CA function) is realized as a function that can descramble scrambled broadcast programs so that only viewers who have signed contracts with the broadcasting service providers can watch these programs. Said CA function scrambles the broadcast video signals and audio signals by using scramble keys. The received scrambled signals are descrambled by a set-top box (also known as a tuner, decoder or the like in some cases) provided by the broadcasting service provider so that the contracted viewers can watch the actual broadcast.

[0003]

In recent years, in company with the development of digitalization technology, instead of using a different set-top box for each service provider that forms a CATV system, a CA function for each individual service provider is incorporated in an IC card. Therefore, it is possible to

watch various broadcast programs by switching the IC card. Various home server systems used for managing these information devices or household electric products have also been developed.

[0004]

Problems to be solved by the invention

The aforementioned conventional technology is designed for receiving picture/sound information of a CATV used in a home. In recent years, however, multimedia information and the like have increased, and the information devices used in each room in a house (office, home, or the like) have also increased. CATV is only one of these information channels. Since the data format, protocol, and the like are different for each of said information channels, the number of cables and connectors used has also increased. In an extreme case, the entire floor is occupied by cables and there is no room to set a foot. Also, since all of the information channels in each room are set up separately, the use efficiency is poor. It is difficult to construct horizontal connection/negotiation between the rooms in a house. In the case of CATV, one license is usually provided to one set-top box (also known as a tuner in some cases). CATV can only be watched in the room having the set-top box. In addition, when wireless LAN, blue tooth, or other near (short) distance radio communication devices will be incorporated in household electric products in the future, the power consumption during standby will also become a problem. It is necessary to pay attention to the effective use of resources in the earth environment and to the problem of generation of CO₂ and find ways to save energy.

[0005]

The objective of the present invention is to provide a centralized information management system that can take advantage of a remote control system to manage in-house multimedia information and information devices in a centralized manner to distribute/provide multifunctional services to each room, can save power by collectively controlling the power supply of each information device and can add or subtract cables by functionally disposing a wiring mechanism that can accommodate many cables of various information channels including power supply connectors in the wall.

[0006]

Means to solve the problems

The invention described in Claim 1 provides a centralized information management system that collectively manages a plurality of in-house information devices, such as CATV, VOD (video on demand), and Internet TV that distributes pictures by multicast, in an office or a home. This centralized information management system is characterized by having an

information terminal device that can selectively receive a large amount of multimedia information of CATV, VOD, Internet TV, or the like that require a reception function under certain conditions, such as ID check, an information distribution means that distributes the multimedia information selectively received by said information terminal device to the corresponding in-house information devices, an information branching means that branches off the information distributed by said information distribution means to the corresponding in-house information devices in each room via in-house wirings, a power supply control means that collectively controls the power supplies of the plurality of in-house information devices in each room via said in-house wirings in order to save power, a remote control means that remotely controls the plurality of in-house information devices in each room and the peripheral devices connected to these information devices in a collective manner by using the remote device having a remote operation function and carried by each family member, and a centralized control management means constituted by a computer system that controls the plurality of in-house information devices in each room depending on communication line connection of a LAN or the like and performs centralized management in association with each of the aforementioned means. The invention described in Claim 2 is characterized by the fact that said power supply control means can turn on the power before sending/receiving information with respect to said in-house information devices and turn off the power after the information has been sent/received in association with said centralized control management means in order to restrain the standby power. The invention described in Claim 3 is characterized by having a monitoring means that monitors the state of each room based on the information of a security camera, smoke, gas, or temperature detectors, and other detection sensors in addition to the aforementioned means.

[0007]

The invention described in Claim 4 is characterized by the fact that said remote control means receives the remote operation signals formed by infrared rays or radio waves transmitted from said portable device by a remote control signal receiver and transfers these signals to said centralized control management means, and said centralized control management means decodes the input remote operation signals, transmits the remote control signals to the in-house information devices required to operate depending on the communication line connection of a LAN or the like, and performs control. The invention described in Claim 5 is characterized by the fact that said centralized control management means has a position registration function for detecting movement of said portable device registered for each person via said remote control signal receiver and can control the in-house information devices in each room according to preset contents corresponding to the movement of said portable device detected by said position registration function.

[0008]

The invention described in Claim 6 is characterized by the fact that said centralized control management means conducts action analysis and preference analysis targeting the operation history and preference of each registered person who has controlled in-house information devices based on information obtained by said remote control means and monitoring means and has an intelligent function and scheduling function reflected in various kinds of operations including automatic operation of each in-house information device. The invention described in Claim 7 is characterized by the fact that said centralized control management means detects the operation information of each person via said remote control means and receives information from an in-house information device that is equipped with health check sensors and can transmit the detected data to manage the health of each person. The invention described in Claim 8 is characterized by the fact that said information branching means has a socket that connects cables or the like on a wall surface and has a long pipe-shaped wiring member that can accommodate many cables in the wall, and each cable is wired from said socket through said pipe-shaped wiring member to an in-house information device via a socket in each room.

[0009]

Embodiment of the invention

In the following, an embodiment of the present invention will be explained with reference to figures. Figure 1 is a configuration diagram of the centralized information management system disclosed in the embodiment of the present invention. Figure 2 is a diagram illustrating the wiring member of the information branching means shown in Figure 1.

[0010]

In Figure 1, 1 represents a centralized information management device that collectively manages information in a house, such as an office or a home, by a computer system. 2 represents a centralized control management means, which manages selective reception of the information of various channels, such as CATV, VOD (video on demand), and Internet TV that distributes images by means of multicasting, information control of in-house distribution, and power supply control for energy saving in a centralized manner. 15 represents an input/output means used for various kinds of settings for centralized control management means 2 to perform centralized control management and display used for control/monitoring. 3 represents an information terminal device, such as a set-top box, which selectively receives each channel by an IC card or the like and distributes the received image or the like to the TV monitor or the like in each room. The channels shown in the figure are CATV, BS/CS, public line, Internet, and VOD. They are

classified based on data for convenience. In fact, superimposition may occur between CATV and VOD service or the like.

[0011]

4 represents an information distribution means. For example, for CATV reception, a coaxial cable extended into the house from an optical fiber network is connected to information terminal device 3 to perform descrambling or other signal processing to output TV signals. On the other hand, information of the Internet is connected by a coaxial cable in a cable modem for CATV in information distribution means 4 through information terminal device 3. The cable modem is connected to the device terminal by a LAN cable to perform information distribution.

[0012]

6 represents in-house wiring that connects information distribution means 4 and information branching means 5. It is possible to use a coaxial cable, LAN cable (10/100BASE-T or the like), IEEE1394 cable, USB cable, single wire, or the like corresponding to the type of in-house information device. These wirings mainly have a bi-directional transmission type configuration. 5 represents an information branching means, which constitutes the main part of the in-house wiring. For example, a pipe-shaped wiring member 20 that can accommodate various kinds of cables 21 as shown in Figure 2 is arranged inside the wall of a room and is installed on the baseboard inside the room so that socket board 22, whereon connector 23 for cable connection and connector 24 for a power supply cable are mounted, is exposed. Wiring to the information devices in each room is performed by connecting the cable connector from the side of in-house wiring 6 to connectors 23, 24 on socket board 22. Wiring member 20 is constituted such that wiring cable 21 can be attached/detached freely and easily in each small block on socket board 22. 7 represents cables accommodated in wiring member 20 arranged inside the wall. They include the wirings for information devices that constitute the wirings to the information devices in each room and the wirings for power supply (power lines).

[0013]

8 represents room NO1, in which TV monitor 18, a PC (personal computer) terminal, monitor camera, smoke detector, gas detector, temperature sensor, various kinds of health checking sensors, an interphone, TEL/FAX, remote control receiver 16, and the like are disposed as in-house information devices. Also, power supply cables (power lines) used for supplying power to these information devices are disposed in wiring member 20. The power for each information device is controlled collectively by power supply control means 12. The power is controlled and managed by centralized control management means 2 to reduce the standby

power in order to reduce power consumption. Also, each person carries a remote control device for remote operation equipped by cellular phone, PDA, or other portable device 11. Rooms NO2-NO10 have the same structure as room NO1.

[0014]

For example, an IR remote operation signal transmission device is used as the remote control device of portable device 11. It is also possible to use a device having a card slot (card slot is used to read/write a recording card used for health checkup to be described later).

[0015]

For example, when an IR remote operation signal is sent from portable device 11 to select a channel, the volume, or the like displayed on TV monitor 18, after the signal is received by remote control receiver 16 and is converted into an electric signal, it is sent to centralized control management means 2. The signal is analyzed by centralized control management means 2 to select the broadcasting channel of CATV, VOD, Internet TV, or the like as demanded. Then, an electric signal instructing the operation of selecting a channel or adjusting the volume is sent via remote control means 13 to information terminal device 3 or TV monitor 18. At that time, centralized information management means 2 controls the power supply (power line) of each information device concerned, turns on the power before sending/receiving information with respect to the information device as demanded, and turns off the power after the information has been sent/received in order to reduce the power consumption.

[0016]

In the following, a case in which TV monitor 18 cannot directly receive remote control by the communication line connection of a LAN or the like will be explained. An IR signal transmitter 17 is mounted on the front surface of a remote control light receiving device of TV monitor 18. When an electric signal indicating switching of the channel of the receiver possessed by the TV monitor or an external input channel, volume adjustment, or the like is sent to IR signal transmitter 17 from centralized control management means 2, IR signal transmitter 17 transmits an IR remote control signal indicating a channel switch or volume adjustment, and the remote control operation of TV monitor 18 is carried out by centralized information management device 1. In the case of an aforementioned information device that cannot receive direct remote control by communication line connection as described above, the information device concerned or the peripheral device connected to the information device is controlled via a control machine for conversion of communication method or protocol.

[0017]

In the following, the operation will be explained. First, if a user in room NO1 wants to watch CATV, he or (she) selects the broadcasting channel of CATV or the program to watch from a program list of VOD, Internet TV, or the like. When the user presses a key on the remote control device of portable device 11 to send an IR remote control signal, remote control receiver 16 receives the signal and converts it into an electric signal and then transfers the electric signal to centralized control management means 2. Centralized control management means 2 analyzes the remote operation signal, checks the ID numbers registered in the system, and identifies the signal as a signal transmitted from portable device 11 in room NO1. The channel of the program that the user wants to watch is confirmed from a program table (not shown in the figure, it is the same as the program list of the user that is constantly updated) in the memory of centralized control management means 2. The confirmed channel is instructed and received by information terminal device 3 and is descrambled, and the TV monitor 18 in room NO1 is controlled via remote control means 13. At that time, an electric signal indicating selection of an external channel or volume adjustment is transmitted to the IR signal transmitter 17 of TV monitor 18 to generate an IR remote control signal. TV monitor 18 is operated by that IR remote control signal to receive a program of CATV. By taking advantage of said various kinds of bi-directional services, the user can receive a desired program in any room. In the case of CATV, the problem of the conventional technology that only allows TV watching in a specific room due to one set-top box and one license can be solved.

[0018]

In this case, centralized control management means 2 operates the power supply of the tuner part (not shown in the figure) of information terminal device 3 or TV monitor 18, turns on the power before sending out the control information, and turns off the power after essential information has been sent in the case of ending reception of a program in order to reduce the power consumption during standby.

[0019]

Centralized control management means 2 is also equipped with a position registration function used for automatically playing the same program on the TV monitor where the user is going so that the user will not miss important scenes when he (or she) needs to go to another room or the bathroom while watching sports or the like. More specifically, centralized control management means 2 confirms the user ID and monitors the IR signal sent from the remote control device of portable device 11. When the user goes to the bathroom or the like, the remote control signal sent from the remote control receiver 16 in room NO1 disappears, while a remote

operation signal including the user ID is input from the remote control receiver in the bathroom among the remote control receivers set in each room and the bathroom. Therefore, centralized control management means 2 turns off the TV monitor 18 in room NO1 and turns on a TV monitor that plays the same program in the bathroom. (Of course, said remote operation can also be realized by using radio waves. For example, a cellular phone can transmit appropriate radio waves to perform local position registration in a house, and the radio waves of the portable device are captured by a directional antenna of the remote control receiver.

[0020]

Centralized control management means 2 also has an intelligent function, which forms a TV program watching history for each user, extracts/analyzes program preferences, and reflects said preferences in an operation or scheduling function, which records/analyzes the operation history, performs activity analysis, and reflects it in controlling the information devices. For example, if a user watches the weather forecast at 6:50 PM every day, centralized control management means 2 can turn on TV monitor 18 at 6:50 PM to show the weather forecast even if the user has forgotten to send a remote operation signal.

[0021]

Also, if a user is not home, the absence of the user can be judged based on the presence/absence of a remote operation signal, and the power supplies of unnecessary devices can be turned off automatically. When the user returns, input from a monitor camera or motion sensor is monitored/detected by monitoring means 14 to turn on the power supply. Such on-demand operation can reduce the power consumption. If it is necessary to preheat a TV monitor or turn on the power of an air-conditioner or the like in advance, the intelligent function and the scheduling function can be combined to perform general control based on analysis of the user's activities. In the case of setting a wake-up time and using [a TV monitor] instead of an alarm clock, a scheduling function depending on the user's setting is used. In the case of predicting the time of returning home and turning on the power, the intelligent function reflecting the activity analysis of the user and the scheduling function are combined to turn on the power automatically.

[0022]

In recent years, electronic devices have been designed appropriately in order to reduce standby power consumption. For example, it is convenient to take advantage of a timer equipped within an air-conditioner. However, the standby power consumption of all electronic devices cannot be ignored. Power control is effective not only for the aforementioned information devices but also for a Japanese heater table, electric blanket, electric carpet, and other

electric/electronic devices that need preheating. In the case of a Japanese heater table, electric blanket, and electric carpet other than information devices, it is also possible to adopt a power control adapter or the like to combine the aforementioned intelligent function and scheduling function to reduce the total power consumption.

[0023]

In the following, the monitoring operation will be explained. Centralized control management means 2 collects the video data of a monitoring camera and the data of a smoke detector, gas detector, temperature sensor, and the like via monitoring means 14. The picture of the monitoring camera is input as video data via a cable and is displayed on the monitor screen of input/output means 15 after it is processed to allow the user to monitor the state inside a room, the presence of an intruder, his personal life, and his security. The data of a smoke detector and temperature sensor are input as electric signals and are compared with reference values. The occurrence of fire or the generation of toxic gas is monitored based on the data of a smoke detector. Abnormal room temperature is detected based on the data of a temperature sensor to automatically adjust the centralized air-conditioning/heating system. If nobody is at home or in the case of an emergency, it is also possible to contact a pre-registered person through a public line or the Internet via information terminal device 3 by using a picture, sound, text, or the like.

[0024]

A card receiving pulse, body temperature, and blood pressure measurement sensor (health checkup sensors) data is prepared for health management of the user. The measurement sensors are installed on the body of the user, and the data are input into the card. The card is inserted into a card slot of the remote control device equipped by portable device 11 to send the data to centralized control management means 2 via remote control receiver 16 to perform a health checkup of the user. Special consideration is given for periodic health checkups (for example, once in the morning and once at night) for the elderly. In addition to the combination of portable device 11 and a card, very recently, toilets having a urine examination function and machines that integrate pulse, body temperature, and blood measurement functions have been sold for civilian use. These machines can also be directly connected by communication lines.

[0025]

If a cellular phone capable of short distance radio connection (blue tooth function) and a wireless LAN or the like can be used without problems in the near future, it will be possible to directly transmit data wirelessly from portable device 11 to centralized control management means 2. In this case, if a broadband cellular phone having a TV telephone function is used as

portable device 11, pictures can also be transmitted. It is also possible to perform remote operation by using radio waves of a wireless LAN or the like instead of IR remote operation with centralized control management means 2 or remote control depending on radio waves from centralized control management means 2 to each information device.

[0026]

As far as Internet connection is concerned, instead of the so-called dialup method using a public line and modem or ISDN and TA, the cable modem of CATV can be used and the connection between the PC terminal and the cable modem is realized by a LAN cable, or an ADSL (asynchronous digital subscriber line) modem or router can be used through a telephone line and connection with the PC terminal is realized by the LAN cable. Since these methods all use a LAN connection, any number of PC terminals can be used in each room and only one modem is needed. It is also possible to share a printer, scanner, or other peripheral machines or files between terminals. Centralized control management means 2 can perform communication management depending on a modem or router or perform shared operation management of a printer or the like to support smooth Internet connection. A PC terminal can also be used for the input/output terminal of centralized control management means 2.

[0027]

The user can directly use TEL/FAX depending on direct connection to a public line. It is also possible to check the number of dialing times of each party dialed, extract a frequently dialed number, and provide personal information of the corresponding party to call through centralized control management means 2. It is also possible to make calls between rooms by using an interphone, which is used as a horizontal contact means that can establish direct contact between different rooms.

[0028]

Centralized information management in typical families has been explained so far. The present invention is not limited to this. Clearly, the present invention can also be applied to offices, hotels, lodging facilities, hospitals, schools, and other organizations.

[0029]

Effect of the invention

As explained above, the invention described in Claim 1 provides a centralized information management system that collectively manages a plurality of in-house information devices, such as CATV, VOD (video on demand), and Internet TV that distributes pictures by

multicast, in an office or a home. It has an information terminal device that can selectively receive a large amount of multimedia information of CATV, VOD, Internet TV, or the like that require a reception function under certain conditions, such as ID check, an information distribution means that distributes the multimedia information selectively received by said information terminal device to the corresponding in-house information devices, an information branching means that branches off the information distributed by said information distribution means to the corresponding in-house information devices in each room via in-house wirings, a power supply control means that collectively controls the power supplies of the plurality of in-house information devices in each room via said in-house wirings in order to save power, a remote control means that remotely controls the plurality of in-house information devices in each room and the peripheral devices connected to these information devices in a collective manner by using a remote device having a remote operation function and carried by each family member, and a centralized control management means constituted by a computer system that controls the plurality of in-house information devices in each room depending on communication line connection of a LAN or the like and performs centralized management in association with each of the aforementioned means. Therefore, it is possible to provide functional intelligent services that collectively manage multimedia information and in-house information devices in an office or home and perform information exchange with each room. According to the invention described in Claim 2, since said power supply control means can turn on the power before sending/receiving information with respect to said in-house information devices and turn off the power after the information has been sent/received in association with said centralized control management means in order to restrain the standby power, the power consumption during standby of all of the in-house information devices can be reduced so that the total power consumption in an office or home can be reduced. According to the invention described in Claim 3, since the system also has a monitoring means that monitors the state of each room based on the information of a security camera, smoke, gas, or temperature detectors, and other detection sensors in addition to the aforementioned means, it is possible to detect leaving and returning to the house or office and automatically control the essential in-house information devices.

[0030]

According to the invention described in Claim 4, said remote control means receives remote operation signals formed by infrared rays or radio waves transmitted from said portable device by a remote control signal receiver and transfers these signals to said centralized control management means, and said centralized control management means decodes the input remote operation signals, transmits the remote control signals to the in-house information devices required to operate depending on the communication line connection of a LAN or the like, and

performs control. Therefore, it is possible to construct a functional remote control system that combines remote control and communication line connection. According to the invention described in Claim 5, said centralized control management means has a position registration function for detecting movement of said portable device registered for each person via said remote control signal receiver and can control the in-house information devices in each room according to preset contents corresponding to the movement of said portable device detected by said position registration function. Therefore, even if a viewer moves to another place while watching sports or the like, he (or she) can continuously watch the same program at the place he (or she) is going without missing important scenes.

[0031]

According to the invention described in Claim 6, said centralized control management means conducts an action analysis and preference analysis targeting the operation history and preferences of each registered person who has controlled in-house information devices based on the information obtained by said remote control means and monitoring means and has an intelligent function and scheduling function reflected in various kinds of operations including the automatic operation of each in-house information device. Therefore, various kinds of intelligent services can be provided by the system. According to the invention described in Claim 7, said centralized control management means detects the operation information of each person via said remote control means and receives information from an in-house information device that is equipped with health check sensors and can transmit detected data to manage the health of each person. Therefore, the user's health can also be managed by the system. According to the invention described in Claim 8, said information branching means has a socket that connects cables or the like on a wall surface and has a long pipe-shaped wiring member that can accommodate many cables in the wall, and each cable is wired from said socket through said pipe-shaped wiring member to an in-house information device via a socket in each room. Therefore, the in-house wirings can be neatly accommodated in the wall, and the work of adding equipment later can be easily carried out without damaging the wall or other construction materials.

Brief description of the figures

Figure 1 is a configuration diagram of the centralized information management system disclosed in the embodiment of the present invention.

Figure 2 is a diagram illustrating the wiring member of the information branching means shown in Figure 1.

Explanation of symbols

- 1 Centralized information management device
- 2 Centralized control management means
- 3 Information terminal device
- 4 Information distribution means
- 5 Information branching means
- 6, 7 In-house wiring
- 8 Room NO1
- 9 Room NO2
- 10 Room NO_n
- 11 Portable device
- 12 Power control means
- 13 Remote control means
- 14 Monitoring means
- 15 Input/output means
- 16 Remote control receiver
- 17 IR signal transmitter
- 18 TV monitor
- 20 Wiring member
- 21 Cable
- 22 Socket board
- 23 Connector
- 24 Power connector

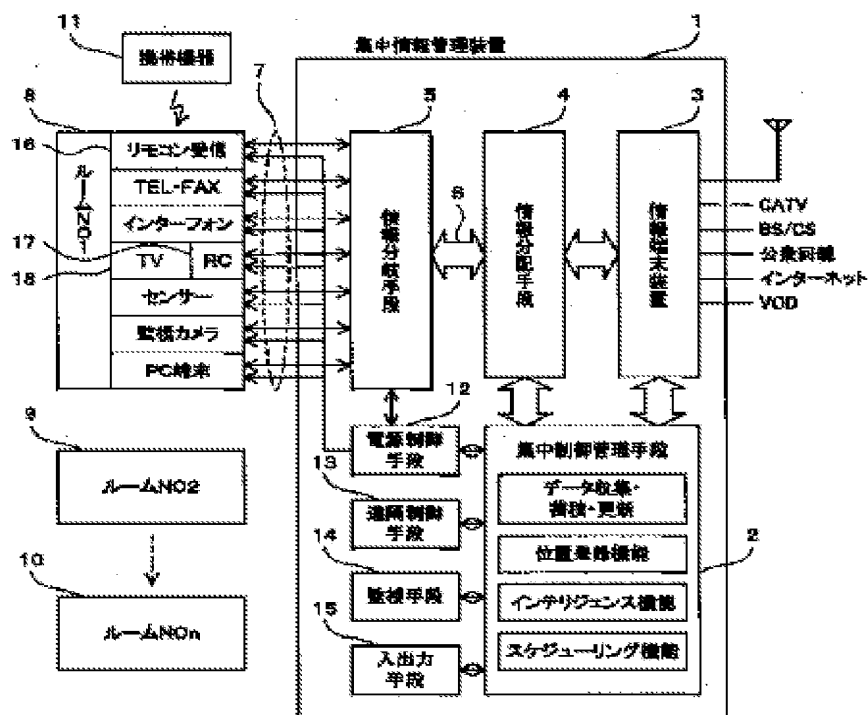


Figure1

- Key:
- 1 Centralized information management device
 - 2 Centralized control management means
 - 3 Data collection, storage, and updating
 - 4 Position registration function
 - 5 Intelligent function
 - 6 Scheduling function
 - 7 Information terminal device
 - 8 CATV
 - 9 BS/CS
 - 10 Public line
 - 11 Internet
 - 12 VOD
 - 13 Information distribution means
 - 14 Information branching means
 - 15 Room NO1
 - 16 Room NO2
 - 17 Room NO1
 - 18 Portable device
 - 19 Power control means
 - 20 Remote control means
 - 21 Monitoring means

- 15 Input/output means
- 16 Remote control receiver
- TEL/FAX
- Interphone
- TV RC
- Sensor
- Monitor camera
- PC terminal

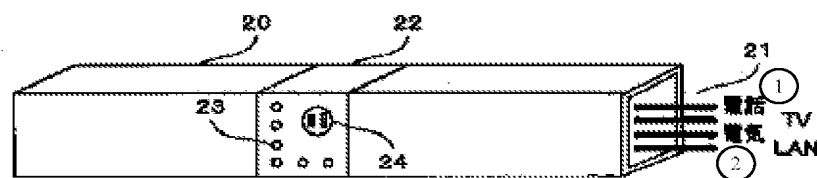


Figure 2

- Key:
- 1 Telephone
 - 2 Electric